

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Final

**AIR QUALITY GENERAL PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Mason County Landfill
Mailing Address: 219 Stanley Reed Court, Maysville 41056

Source Name: Mason County Landfill
Mailing Address: 219 Stanley Reed Court, Maysville, 41056

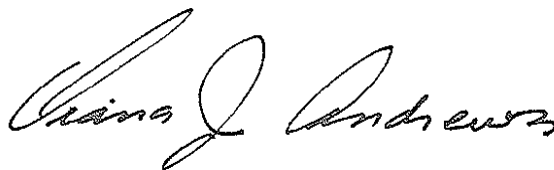
Source Location: 7055 Clarkson-Sherman Road, Maysville, KY

Permit: G-07-001
Agency Interest: 3013
Activity: APE20070002
Review Type: TV, NSPS, NESHAP
Source ID: 21-161-00039

Regional Office: Ashland Regional Office, 1550 Wolohan Drive, Suite 1, Ashland, KY 41102-8942
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County: Mason

Application
Complete Date: March 11, 2007
Issuance Date: October 16, 2007
Expiration Date: October 16, 2012



**John S. Lyons, Director
Division for Air Quality**

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ATTACHMENTS:

ATTACHMENT A: FORM FOR RECORDING ASBESTOS WASTE SHIPMENTS

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Subpart WWW

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division of Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01

Municipal Solid Waste (MSW) Landfill

Description:

(1) A MSW landfill constructed, reconstructed, or modified on or after May 30, 1991 and having a design capacity equal to or greater than 2.5 million megagrams by mass and 2.5 million cubic meters by volume or

(2) A MSW landfill has accepted waste since November 8, 1987 or has more capacity for waste deposition, that includes a bioreactor and that meets any one of the three criteria below:

A MSW landfill that is a major source as defined in 40 CFR 63.2 of subpart A.

A MSW landfill is collocated with a major source.

A MSW landfill that is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters and has estimated uncontrolled emissions of NMOC equal to or greater than 50 megagrams per year (Mg/year) as calculated according to 40 CFR 60.754(a).

APPLICABLE REGULATIONS:

40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills;

40 CFR 61, Subpart M - National Emission Standard for Asbestos;

40 CFR 63, Subpart AAAA - National Emission Standard of Hazardous Air Pollutants for Municipal Solid Waste Landfills;

401 KAR 63:015, Flares.

1. Operating Limitations:

A. Pursuant to 40 CFR 60.752(b) a landfill with calculated emissions of NMOC (nonmethane organic compounds) greater than 50 Mg (megagrams) per year shall install a gas collection and control system within 30 months of exceeding 50 Mg of NMOC emissions per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in §60.757(c)(1) or (2).

1. Whether active or passive, collection systems shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill. Both systems shall also be designed to minimize off-site migration of subsurface gas.
 - a. Gas shall be collected from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period 5 years or more if active, or 2 years or more if closed or at final grade.
 - b. Active systems shall collect gas at a sufficient extraction rate to reduce surface emissions of methane to less than 500 ppm above background levels.
 - c. Passive systems shall be installed with liners on the bottom and all sides in all areas in which gas is to be collected. Liners shall be installed as required under 40 CFR 258.40.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. The permittee shall place the gas collection wells or alternative design components as specified in the approved design plan pursuant to 40 CFR 60.755(b).
- B.** Pursuant to 40 CFR 60.759(a) the permittee shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Division for Air Quality and the Division of Waste Management.
1. The collection devices to achieve comprehensive control of surface gas emissions shall be certified by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates, and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.
 2. The sufficient density of gas collection devices determined in **(B.)** above shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.
 3. The placement of gas collection devices determined in **(B.)** above shall control all gas producing areas, with the following exceptions in (a) and (b) below:
 - a. Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided in 40 CFR 60.758 (d). See Section 5 - **Specific Recordkeeping Requirements**.
 - b. Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount location and age of the material shall be documented and provided to the Division upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the equation on the following page:
 - c. The values for k and C_{NMOC} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values are: $k = 0.05$ per year, $L = 170$ cubic meters per megagram, and $C_{NMOC} = 4000$ ppm by volume as hexane. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material has been documented.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Calculation for NMOC emissions: 40 CFR 60.754(a)

Default values for k, L, and C_{NMOC} shall be 0.05 per year, 170 cubic meters per megagram, and 4000 ppm by volume as hexane respectively. If the actual year to year solid waste acceptance rate is known:

$$M_{NMOC} = \sum_{i=1}^n 2 k L M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

where

M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year;

k = methane generation rate constant, year⁻¹;

L = methane generation potential, cubic meters per megagram solid waste;

M_i = mass of solid waste in the ith section, megagrams;

t_i = age of the ith section, years;

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane;

3.6 X 10⁻⁹ = conversion factor; and

$$\sum_{i=1}^n = \text{Sum of NMOC emission from each sections } i=1 \text{ to } n \text{ of the landfills.}$$

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained.

If the actual year to year solid waste acceptance rate is not known:

$$M_{NMOC} = 2L_o R (e^{-kc} - e^{-kt}) (C_{NMOC}) (3.6 \times 10^{-9})$$

M_{NMOC} = mass emission rate of NMOC, megagrams per year

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year⁻¹

t = age of landfill, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

c = years since closure (for active land-fill, c = 0, then e^{-kc} = 1).

3.6 X 10⁻⁹ = conversion factor

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for R, if documentation of the nature and amount of such wastes is maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- C. Pursuant to 40 CFR 60.755(b) the approved control system design shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:
(a) 5 years or more if the landfill is active; or (b) 2 years or more if closed or at final grade.
- D. Pursuant to 40 CFR 60.759(b).
1. The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.
 2. Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.
 3. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.
- E. Pursuant to 40 CFR 63.6
1. The permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan. The plan shall describe in detail procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with emission limits stated in this permit. For the compliance date pertaining to your specific situation see 40 CFR 63.1945.
 2. If the calculated NMOC mass emission rate is less than 50 Mg per year, the permittee shall submit an emission rate report as detailed in **Specific Reporting Requirements**.
 3. If the calculated NMOC mass emission rate is greater than 50 Mg per year, the permittee shall either:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- a. Submit a collection and control plan prepared by a professional engineer to the Division within one year, and
 - b. Install a collection and control system within 30 months after the first annual report in which the emission rate equals or exceeds 50 Mg per year, or
 - c. Determine the site-specific NMOC concentration by sampling, and substitute this value into the equation above to determine M_{NMOC} per year.
- 4) If upon recalculation, the annual NMOC emission rate is greater than 50 Mg per year, the permittee shall either:
 - a. Comply with conditions E.3) a and E.3) b above or,
 - b. Determine the site-specific methane generation rate constant and recalculate M_{NMOC} using the site-specific methane generation rate constant (k) and the site-specific NMOC concentration determined by sampling.
- F.** If calculation using the site-specific NMOC emission rate or using that and the site specific methane generation rate constant shows an annual NMOC emission rate less than 50 Mg per year, the permittee shall submit an emission rate report as detailed in **Specific Reporting Requirements**.
- G.** For facilities that handle asbestos containing waste, Pursuant to 40 CFR 61.154(c) at the end of each operating day, or at least once every 24- hour period while the site is in continuous operation, asbestos containing waste material deposited at the site during the operating day or the previous 24- hour period shall:
 1. Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, or
 2. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. The permittee may use other equally effective dust suppression agents upon prior approval from the Division of Air Quality. Any used, spent, or other waste oil is not considered a dust suppression agent.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

- A. For all landfills using open flares, pursuant to 401 KAR 63:015, no person shall cause, suffer, or allow the emission into the open air of particulate matter from any flare which is greater than twenty (20) percent opacity for more than three (3) minutes in any one (1) day.
- B. For landfills with annual emissions of NMOC greater than 50 Mg, pursuant to 40 CFR 60.753(d), operate the collection system so that the methane concentration shall be less than 500 ppm at locations above background at the surface of the landfill. This applies at all times except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.
- C. For landfills with annual emissions of NMOC greater than 50 Mg, pursuant to 40 CFR 60.752(b)(2)(iii) gas collected from the landfill must be controlled by either:
 - 1. An open flare designed and operated in accordance with 40 CFR 60.18, or
 - 2. A control system designed and operated to reduce NMOC 98% by weight, which if that control system is an enclosed combustor can alternatively reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3% oxygen, or
 - 3. A treatment system that processes the collected gas for subsequent sale or use. Any gas vented atmospherically shall be subject to the requirements of 40 CFR 60.752(b)(2)(iii) (A) or (B).

3. Testing Requirements:

The following requires are applicable to sources whose NMOC emissions exceed 50 Mg/year.

- A. The owner or operator of a controlled landfill shall conduct an initial performance test of the control system to determine reduction efficiency for NMOC or parts per million by Volume of NMOC. The test must be completed no later than 180 days after the initial startup of the approved control system. The permittee shall use Method 25, 25C or Method 18 of Appendix A of 40 CFR 60 to determine compliance with **Emission Limitations 2.C.2;** or
- B. If using an open flare as a control device, initial compliance shall be demonstrated using EPA Test Method 22. The observation period shall be 2 hours. See also Section G (4, 5) of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**4. Specific Monitoring Requirements:**

The following requirements are applicable to sources whose NMOC emissions exceed 50 Mg/year,

A. 1. Pursuant to 40 CFR 60.755 Compliance Provisions, the permittee shall monitor monthly, at each wellhead:

- i. The gauge pressure in the gas collection header as detailed in 40 CFR 60.755(a)(3).
- ii. The temperature and nitrogen or oxygen levels as provided in 40CFR 60.753(c).

The owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen. If a well exceeds one of the operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Division for approval. The permittee shall not be required to expand the system as required above if the exceedance occurs within the first 180 days after gas collection system startup. Pursuant to 40 CFR 60.753(b) the gauge pressure in the gas collection header shall be negative.

Exceptions to the Requirement of Negative Pressure in the Header:

- a. A fire or increased well temperature
 - b. If using a geomembrane or synthetic cover, the permittee shall develop acceptable pressure limits in the collection and control system design plan.
 - c. If a well is decommissioned positive static pressure may be experienced after it is shut down to accommodate declining flows.
- 2.** Pursuant to 40 CFR 60.753(c) the nitrogen level in the gas collection system shall be less than 20%. Method 3C shall be used to determine nitrogen levels unless an alternative test method has been approved by the Division; or
- 3.** The oxygen level in the gas collection system shall be less than 5%. An oxygen meter using Method 3A or 3C shall be used to determine oxygen levels unless an alternative test method has been approved by the Division. The following exceptions to Method 3A or 3C shall be allowed:
- a. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span.
 - b. A data recorder is not required.
 - c. Only two calibration gases are required, a zero and a span, and ambient air may be used as the span.
 - d. A calibration error check is not required.
 - e. The allowable sample bias, zero drift, and calibration drift are ± 10 percent.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. The permittee shall monitor the temperature of the landfill gas. The temperature shall not exceed 55° C.
 5. A higher operating temperature, nitrogen or oxygen value at a particular well may be established contingent upon demonstration by supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
- B.**
1. Pursuant to 40 CFR 60.753(d) the permittee shall monitor quarterly, at the surface to ensure that the methane concentration are less than 500 parts per million above the background level at the surface of the landfill. Starting no sooner than 90 days after installation of the collection and control system the permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals, (or a site-specific established spacing) and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. Areas with steep slopes or other dangerous areas may be excluded from monitoring.
 2. Pursuant to 40 CFR 60.755 (c) and (d) methane concentrations shall be measured on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the approval of the Division. A closed landfill with no monitored exceedances in three consecutive quarterly monitoring periods may perform monitoring annually thereafter. A reading of 500 ppm or greater will require reversion to quarterly monitoring.
 3. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of 40 CFR Chapter 60, except that “methane” shall replace all references to VOC.
 4. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air.
 5. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of 40 CFR Chapter 60, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of 40 CFR Chapter 60 shall be used.
 6. The calibration procedures provided in section 4.2 of Method 21 of appendix A of 40 CFR Chapter 60 shall be followed immediately before commencing a surface monitoring survey.
 7. Pursuant to 40 CFR 60.755(c) the background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

8. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A to 40 CFR 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
9. Any reading of 500 ppm or more above background shall be recorded as an exceedance and the following actions shall be performed. As long as these specified actions are taken, the exceedance is not considered a violation of 40 CFR 60.753(d)
 - a. The location of each monitored exceedance shall be marked and recorded.
 - b. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 days calendar days of detecting the exceedance. See 8. **Alternate Operating Scenarios (page 21)**
 - c. If re-monitoring shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location in the same quarterly monitoring period, see e) below for action to be taken.
 - d. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm above background at the 10 day re-monitoring shall be re-monitored in 1 month from the date of the initial exceedance. If the 1 month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1 month re-monitoring shows an exceedance, the procedure in c), or e) shall be followed.
 - e. For any location where monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Division for approval.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**C. Control Device Monitoring:**

1. Pursuant to 401 KAR 52:020, Section 26, if using an open flare the permittee shall perform a visual observation of emissions once each week. Visible emissions of smoke shall necessitate observation using Method 9 from 40 CFR 60, Appendix A to determine if opacity readings are greater than 20%. The Method 9 observation shall be performed within 24 hours of the initial observance of visible emissions from the flare.
2. Pursuant to 40 CFR 60.756 (c), for landfills with annual emissions of NMOC greater than 50 Mg/year; if using an open flare the permittee shall install a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
3. Pursuant to 40 CFR 60.756 (b), for landfills with annual emissions of NMOC greater than 50 Mg/year; if using an enclosed combustor including enclosed flares the permittee shall calibrate, maintain, and operate according to the manufacturer's specifications a temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 % of the temperature being measured expressed in degrees Celsius, or $\pm 0.5^{\circ}\text{C}$, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.
4. Pursuant to 40 CFR 60.756 (b), for landfills with annual emissions of NMOC greater than 50 Mg/year; whether using an open flare or an enclosed combustor there shall also be a device to record flow to, or bypass of the control device. The permittee shall either:
 - a. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
 - b. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
5. Pursuant to 40 CFR 60.756(d) **if using a control device other than an open flare or an enclosed combustor**; the permittee shall provide to the Division sufficient information to describe the operation of the control device, the operating parameters that would indicate proper performance and appropriate monitoring procedures.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**5. Specific Recordkeeping Requirements:**

Pursuant to 40 CFR 60.758(b) unless an alternative to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions has been proposed, each owner or operator of an MSW landfill with a design capacity equal to or greater than 2.5 million Mg and 2.5 million cubic meters shall keep up-to-date, readily accessible, on-site records of each applicable item below:

Records to be kept a minimum of 5 years

- A. 401 KAR 52:020, Section 26, "Cabinet provisions for issuing Title V permits". The permittee shall keep dated records of results of qualitative emission observations and/or Method 9 observations for flares.
- B. For sources whose NMOC emissions exceed 50 Mg/year pursuant to 40 CFR 60.758(a) the design capacity report which triggered construction of a collection and control system, the current amount of solid waste in place, and the year-by-year waste acceptance rate. Records may be maintained off-site provided they are retrievable within 4 hours. Paper or electronic records are acceptable.
- C. For sources whose NMOC emissions exceed 50 Mg/year pursuant to 40 CFR 60.758(c) continuous records of the equipment operating parameters specified to be monitored in **Specific Monitoring Requirements**, as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
- D. For sources whose NMOC emissions exceed 50 Mg/year pursuant to 40 CFR 60.758(e), all collection and control system **exceedances** of the conditions in Section 4 **Specific Monitoring Requirements**, the reading in the subsequent month, whether or not the second reading is an exceedance, and the location of each exceedance.
- E. For sources whose NMOC emissions exceed 50 Mg/year pursuant to 40 CFR 60.758(c) continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.
- F. For sources whose NMOC emissions exceed 50 Mg/year pursuant to 40 CFR 60.758(c) if using a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 40 CFR 60.752(b)(2)(iii), the permittee shall keep up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- G. For sources whose NMOC emissions exceed 50 Mg/year pursuant to 40 CFR 60.758(c) if **using an open flare** the permittee shall keep continuous records of the flame or flare pilot flame monitoring specified under **Specific Monitoring Requirements**, and of all periods of operation in which the flame or flare pilot flame is absent.

Exceedances/Deviations:

- H. Pursuant to 40 CFR 60.758(c)(1), 40 CFR 63.10(d) and 40 CFR 63.1965 the following constitute exceedances that shall be recorded and reported:
1. For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 MMBtu/hr) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance was demonstrated.
 2. For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone.
 3. In an instance when 1 or more hours during a 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data has measured values for at least three of the 15-minute monitoring periods within the hour.
 4. When procedures as written in the startup, shutdown or malfunction (SSM) plan required in **Operating Limitations** E.1) were not followed during any SSM.

Records to be kept for the Life of the Control Equipment

- I. Pursuant to 40 CFR 60.758(b) each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records of the data listed in paragraphs (1) through (4) below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
1. The maximum expected gas generation flow rate as calculated in **Specific Reporting Requirements** below. The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Division.
 2. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in **Operating Limitations**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. If using an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:
 - a. The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
 - b. The percent reduction of NMOC achieved by the control device. The percent reduction shall be determined as specified in either Method 25, 25C or Method 18 in appendix A, 40 CFR 60. When calculating efficiency the permittee shall use the equation below.

$$\text{Control efficiency} = (\text{NMOC}_{\text{IN}} - \text{NMOC}_{\text{OUT}}) / (\text{NMOC}_{\text{IN}})$$

where, NMOC_{IN} = mass of NMOC entering control device

NMOC_{OUT} = mass of NMOC exiting control device

4. If using a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.
5. If using an open flare: the flare type (i.e, steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame or the flare flame is absent.

Records to be kept for the Life of the Collection System:

J. Pursuant to 40 CFR 60.758(d) the following will be kept:

1. A plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
2. The installation date and location of all newly installed collectors as specified in **Operating Limitations**.
3. Documentation of the nature, date of deposition, amount, and location of asbestos containing or nondegradable waste as well as any non-productive areas excluded from collection as described in **Operating Limitations**.

K. Pursuant to 40 CFR 61.154 for all asbestos-containing waste material received, the permittee shall:

- a. Maintain waste shipment records using the form in Attachment C to this permit or a similar form which includes the following information:
 - i. The name, address, and telephone number of the waste generator, and of the transporter (if different).
 - ii. The quantity of the asbestos-containing waste material in cubic meters (cubic yards).
 - iii. The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. See **6. Specific Reporting Requirements**
 - iv. The date of receipt.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.
- c. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee shall report this as described below in **6. Specific Reporting Requirements.**
- d. Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map, diagram or other approved media of the disposal area.

6. Specific Reporting Requirements:

- A. Pursuant to 40 CFR 60.757(a) the permittee shall submit an initial design capacity report no later than ninety days after the date of commenced construction, reconstruction, or modification. The design capacity report shall contain:
 1. The date of commencement of construction;
 2. A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be land filled according to the permit issued by the Division of Waste Management.
 3. The maximum design capacity of the landfill.
 4. An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.758(f).
- B. Pursuant to 40 CFR 60.757(b) the permittee shall submit an NMOC emission rate report to the Division initially and annually thereafter unless:
 1. The estimated NMOC emission rate is less than 50 megagrams per year in each of five years, the permittee may elect to submit an estimate of the NMOC emission rate for the next five year period in lieu of the annual report. This estimate shall include the current amount of solid waste in place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Division. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Division. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate; or

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. The permittee has installed a collection and control system in compliance with 40 CFR60.752(b)(2). The permittee shall not be required to submit an annual NMOC emission rate estimate during such time as the collection and control system is in operation and in compliance with the conditions of this permit.
- C.** Pursuant to 40 CFR 60.757(c) the permittee shall submit a collection and control system design plan to the Division within 1 year of the first report in which the NMOC emission rate exceeds 50 megagrams per year with these exceptions:
1. If the permittee elects to recalculate the emission rate using the actual NMOC concentration as detailed in **Operating Limitations**, and the resulting NMOC emission rate is less than 50 Mg/yr, periodic reporting shall be resumed as described in **6. Specific Reporting Requirements. B.1** until the calculated emission rate is equal to or greater than 50 Mg/yr. The revised NMOC emission rate report shall be submitted within 180 days of the first calculated exceedance of 50 Mg/yr.
 2. If the permittee elects to recalculate the emission rate using the site-specific methane generation rate constant (k) as detailed in **Operating Limitations**, E.4.b and the resulting NMOC emission rate is less than 50 Mg/yr, periodic reporting shall be resumed as described in **6. Specific Reporting Requirements. B.1** until the calculated emission rate is equal to or greater than 50 Mg/yr. The revised NMOC emission rate report shall be submitted within 1 year of the first calculated exceedance of 50 Mg/yr.
- D.** The owner or operator of a controlled landfill shall submit a closure report to the Division within 30 days of waste acceptance cessation.
- E.** Exceedances shall be reported according to Section F. 8 of this permit.
- F.** Pursuant 40 CFR 61, Subpart M the permittee shall comply with the following Asbestos Reporting Requirements
1. The permittee shall report, in writing, **by the following working day**, the presence of a significant amount of improperly enclosed or uncovered asbestos-containing waste in any load received. The report shall be sent to the local, State, or U.S. EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and if different, the Division of Air Quality Regional Office listed on the front page of this permit. A copy of the waste shipment record shall be included in the report.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. The permittee shall report, in writing, any discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received if not resolved within 15 days after receiving the waste. The report shall be sent to the local, State, or U.S. EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and if different, the Division of Air Quality Regional Office listed on the front page of this permit. The report shall describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
 3. The permittee shall submit to the Division upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.
 4. The permittee shall notify the Division in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at waste disposal site and is covered. If the excavation begins on a date other than the one contained in the original notice, notice of the new start date must be provided to the Division at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
 - a. Scheduled starting and completion dates.
 - b. Reason for disturbing the waste.
 - c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Division may require changes in the emission control procedures to be used.
 - d. Location of any temporary storage site and the final disposal site.
- G.** For sources whose NMOC emissions exceed 50 Mg/year the owner or operator shall submit an equipment removal report to the Division 30 days prior to removal or cessation of operation to the control equipment. The equipment removal report shall contain all of the following items:
1. A copy of the closure report;
 2. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
 3. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC per year.
- H.** Within 60 days of reaching maximum production, but no later than 180 days after startup, each owner or operator complying by installation of a collection and control system must submit an initial performance test report as required under 40 CFR 60.8 which includes the following items:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
2. The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based.
3. The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;
4. The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on non productivity and the calculations of gas generation flow rate for each excluded area; and
5. The provisions for control of off-site migration; and
6. The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill.
7. Pursuant to 40 CFR 60.755(a):
 - a. For the purposes of calculating the maximum expected gas generation flow rate one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the U.S. EPA. If k has been determined by testing the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus estimated number of years until closure.

For sites with unknown year-to-year waste acceptance rate:

$$Q_m = 2L_o R (e^{-kc} - e^{-kt}) \text{ where,}$$

Q_m = maximum expected gas generation flow cubic meters per year

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year⁻¹

t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years

c = time since closure, years (for an active landfill, $c = 0$ and $e^{-kc} = 1$)

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^n 2 k L_o M_i (e^{-kt_i}) \text{ where,}$$

Q_M = maximum expected gas generation flow rate, cubic meters per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the i th section, megagrams

t_i = age of the i th section, years

- c. If a collection and control system has been installed; actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs a. and b. above. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs a. and b. or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.
- I.** Pursuant to 40 CFR 60.757(f) and 40 CFR 63.1980 each owner or operator of a landfill using an active collection system shall submit to the Division semiannual reports, due January 30 and July 30 of each year, containing the following recorded information:
1. Value and length of time of exceedance for applicable parameters monitored in **Specific Monitoring Requirements**.
 2. Description and duration of all periods when either: the gas stream is diverted from the control device through a bypass line; or a bypass is indicated by the gas flow rate monitoring device described in **4. Specific Monitoring Requirements: C. Control Device Monitoring: 4.**
 3. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour.
 4. All periods when the collection system was not operating in excess of 5 days.
 5. The location of each exceedance of the 500 ppm methane concentration and the concentration recorded at each location for which an exceedance was recorded in the previous month.
 6. The date of installation and the location of each well or collection system expansion added pursuant to **4. Specific Monitoring Requirements: B. (9) e.**
 7. Pursuant to 40 CFR 63.10(d) documentation that procedures as written in the SSM plan required in **1. Operating Limitations E.(1).** were followed during any startup, shutdown, or malfunction.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- J.** Pursuant to 40 CFR 63.10(d) if an action taken by the permittee during a startup, shutdown or malfunction is not consistent with the procedures specified in the SSM plan and the source exceeds any applicable emission limitation in the relevant emission standard, the permittee shall report such action within 2 working days after the action was taken. The report shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event. The letter shall contain the name, title and signature of a responsible official of the company certifying as to its accuracy, and explain the circumstances of the event, the reason for not following the SSM plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

7. Specific Control Equipment Operating Conditions:

For landfills with annual emissions of NMOC greater than 50 Mg/year

A. Pursuant to 40 CFR 60.753(e)

1. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.
2. The control or treatment system shall be operated at all times when collected gas is routed to the system.

- B.** Pursuant to 40 CFR 60.754(b) the permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed using the following equation. The permittee may substitute another method to determine QLFG and CNMOC upon approval by the U.S. EPA.

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

where,

M_{NMOC} = mass emission rate of NMOC, in megagrams per year

Q_{LFG} = flow rate of landfill gas, in cubic meters per minute

C_{NMOC} = NMOC concentration, in parts per million by volume as hexane

Q_{LFG} shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of 40 CFR 60.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C_{NMOC} shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of 40 CFR 60. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The permittee shall divide the NMOC concentration from Method 25C by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

8. Alternate Operating Scenarios:

- A. In Section B, **4. Specific Monitoring Requirements**, adjustments to cover and rescanning for methane concentrations are required in the event of an exceedance. The Division recognizes that it is not always possible to perform the required cover maintenance within a 10-day time frame due to inclement weather conditions. In such circumstances the timetable shall be extended to allow rescanning on the next working day following completion of repairs. The permittee shall record the reason for the delay in the exceedance record.
- B. Provisions exist within Subpart WWW for the use of alternatives to many of the requirements, subject to approval of the Division of Air Quality, and in some instances the U.S. EPA. Alternatives to the conditions of this permit shall be submitted to the Division using the appropriate form(s) from DEP 7007 series and or supporting information.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 02 (-) Fugitive Emission Sources

Fugitive means the emissions of any air contaminant into the open air other than from a stack or air pollution control equipment exhaust.

This is to include: Stockpiles, Haul Roads, Yard Areas whether paved or unpaved, Blasting, Waste Solidification, and Soil Cover operations.

APPLICABLE REGULATIONS:

401 KAR 63:010, fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division of Air Quality

1. Operating Limitations:

Pursuant to 401 KAR 63:010, Section 3(1), no person shall cause, suffer or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include when applicable, but not be limited to the following:

1. Use, where possible, of water or chemicals for control of dust in construction operations, grading of roads and clearing of land;
2. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;
3. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
4. The maintenance of paved roadways in a clean condition;
5. The prompt removal of earth or other materials from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water. See 401 KAR 63:010, Section (3)(1) (f).

Pursuant to 401 KAR 63:010, Section 3(2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

Pursuant to 401 KAR 63:010, Section 3(3), when dust, fumes gases, mist, odorous matter, vapors or any combination thereof escape from equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the equipment are treated by removal or destruction of air contaminants before discharge to the open air.

Pursuant to 401 KAR 63:010, Section 4(4), no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

Pursuant to 401 KAR 63:010, the permittee shall not cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

Compliance Method: Employ dust suppression measures as needed to meet the emission limitations above.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

Pursuant to 401 KAR 52:020, Section 26 (1), Visual observations shall be made daily during operation of the affected facility to determine compliance with **2. Emission Limitations** above.

5. Specific Recordkeeping Requirements:

1. Pursuant to 401 KAR 52:020, Section 26 (1), the permittee shall record the date, time and type of equipment for each use of dust suppression equipment for processes which are manually operated and are intermittent. For example: Use of a water truck to spray roads.
2. Pursuant to 401 KAR 52:020, Section 26 (1), the permittee shall record the results of daily visual observations.

6. Specific Reporting Requirements:

See Section F.5 and F.6. of this permit.

7. Specific Control Equipment Operating Conditions:

Appropriate equipment for dust suppression shall be on site and in working order at all times of operation of the landfill.

8. Alternate Operating Scenarios:

Freezing temperatures or significant rainfall shall preclude the application of water to suppress fugitive emissions.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Compost Areas	401 KAR 63:010
2. Leachate tanks, etc	None
3. Diesel tanks	None
4. Gasoline/Kerosene tanks less than 10,567 gallons capacity	401 KAR 59:050
5. Hydraulic oil tank, used oil tank, virgin oil tank,	None
6. Tire shredder with gasoline engine (less than 50 Hp),	None
7.. Kerosene, propane-fired space heaters< 1 MMBtu/hr,	None
8. Diesel and gasoline internal combustion (IC) engines< 50 HP,	None
9. Propane tank	None
10. .Maintenance cold cleaners.	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

N.A.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division of Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division of Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division of Air Quality
Division Regional Office
(Listed on front page)

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division of Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS**1. General Compliance Requirements**

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in the permit and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division of Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Applies to construction of gas collection and control system at such time as NMOC generation rate threshold of 50 Mg per year is reached (per 40 CFR 60, Subpart WWW) and control of bioreactors (per 40 CFR 63, Subpart AAAA- for facilities that have bioreactors).

SECTION G - GENERAL PROVISIONS (CONTINUED)

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Testing Requirements

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division of Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;

SECTION G - GENERAL PROVISIONS (CONTINUED)

- (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
 - c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].
8. Ozone Depleting Substances
- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
 - b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

Not Applicable

SECTION I - COMPLIANCE SCHEDULE

Not Applicable